

Serial No. 10/776,105 -2-  
Reply to Office Action dated December 8, 2005

Docket No. 1232-5281

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (currently amended) A stereoscopic image display apparatus for displaying different parallax images on a viewing region, comprising:

a display device displaying the a plurality of parallax images by different pixels; and

a horizontal separating member including a plurality of partial separating regions which extend in a horizontal direction and are arranged along a vertical direction, each partial separating region including a plurality of state-selective regions which are arranged along the horizontal direction, each state-selective region selectively transmitting an incident light according to a state of the incident light; and

a vertical separating member projecting light from the predetermined pixel of the display device onto the predetermined position of the horizontal separating member in the vertical direction,

an optical separating member in which a plurality of state-selective regions are lined up, which have properties of selectively transmitting light with different states, the optical separating member directing, of the light from the pixels, the light transmitted through the state-selective regions to a different viewing region for each parallax image.

2-3. (canceled)

4. (currently amended) The stereoscopic image display apparatus according to claim 1 3,

Serial No. 10/776,105

-3-

Docket No. 1232-5281

Reply to Office Action dated December 8, 2005

wherein a projection magnification of the vertical separating member ~~the optical control member~~ in the vertical ~~second~~ direction onto the horizontal separating member ~~the optical separating member~~ with respect to the display device is larger than 1.

**5. (currently amended)** The stereoscopic image display apparatus according to claim 1, 3, wherein, in a case where a first and a second state-selective regions arranged in the different partial separating regions selectively transmit light with different states, respectively, the first and the second state-selective regions do not correspond with each other in the vertical direction.

~~wherein the state-selective regions in the optical separating member are arranged such that positions of state-selective regions belonging to different rows of the first direction rows of the state-selective regions and having different properties do not overlap in the second direction.~~

**6. (currently amended)** The stereoscopic image display apparatus according to claim 1, wherein the state of the incident light is a polarization state, ~~the plurality of state-selective regions have properties of selectively transmitting light with different polarization states.~~

**7. (withdrawn)** The stereoscopic image display apparatus according to claim 1, wherein the plurality of state selective regions have properties of selectively transmitting light with different wavelength regions.

**8. (withdrawn)** The stereoscopic image display apparatus according to claim 1,

Serial No. 10/776,105

-4-

Docket No. 1232-5281

Reply to Office Action dated December 8, 2005

wherein the plurality of state selective regions have properties of selectively transmitting light with different polarization states and wavelength regions.

**9. (new)** The stereoscopic image display apparatus according to claim 1,

wherein the vertical separating member is a cylindrical lens array including a plurality of cylindrical lenses whose generatrix are horizontal and are arranged along the vertical direction, or a mask having a plurality of slit apertures which are oblong in the horizontal direction and are arranged repeatedly in the vertical direction.

**10. (new)** The stereoscopic image display apparatus according to claim 1,

wherein a first pixel of the display device displays a first parallax image of the parallax images, and a pixel adjacent to the first pixel in the vertical direction or the horizontal direction displays the parallax image different from the first parallax image.

**11. (new)** The stereoscopic image display apparatus according to claim 1,

wherein a first pixel of the display device displays a first parallax image of the parallax images, and a pixel adjacent to the first pixel in the vertical direction, the horizontal direction or oblique direction displays the parallax image different from the first parallax image.

**12. (new)** A stereoscopic image display apparatus for displaying different parallax image on a viewing region, comprising:

a display device displaying the parallax images by different pixels; and

Serial No. 10/776,105

-5-

Docket No. 1232-5281

Reply to Office Action dated December 8, 2005

a horizontal separating member including a plurality of partial separating regions which extend in a horizontal direction and are arranged along a vertical direction, each partial separating region including a plurality of state-selective regions arranged along a horizontal direction,

wherein each state-selective region selectively transmits light having a part of visible wavelengths; and

wherein the parallax images displayed on the display device are displayed at different positions of the viewing region by the horizontal separating member.